CLAIMS:

1. A method of cementing in a subterranean zone comprising:

forming a cement composition by mixing a cement mix comprising a base blend and proportioned fluid loss additives with a mixing fluid, which base blend comprises zeolite and at least one cementitious material, and which proportioned fluid loss additives comprise at least a first fluid loss additive having a first molecular weight and at least a second fluid loss additive having a second molecular weight, which second molecular weight is less than the first molecular weight, and which first fluid loss additive and second fluid loss additive are present in the base blend in a ratio of about 1:5.67;

placing the cement composition into the subterranean zone; and

allowing the cement composition to set therein.

2. The method of claim 1 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b] \cdot xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

3. The method of claim 1 wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

4. The method of claim 1 wherein the base blend comprises from about 20 to about 60 weight percent zeolite.

5. The method of claim 1 wherein the base blend comprises about 40 weight percent zeolite.

6. The method of claim 1 wherein the first molecular weight is about twelve times as much as the second molecular weight.

7. The method of claim 1 wherein the first molecular weight is about four times as much as the second molecular weight.

8. The method of claim 1 wherein the first molecular weight is about 2.66 times as much as the second molecular weight.

7. The method of claim 1 wherein the first molecular weight is in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the fluid loss additive having the second molecular weight comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

8. The method of claim 1 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

9. The method of claim 1 wherein the first fluid loss additive is present in the cement mix in an amount of about 15% by weight of the base blend, and the second fluid loss additive is present in the cement mix in an amount of about 85% by weight of the base blend.

10. The method of claim 1 wherein the first fluid loss additive is present in the cement mix in an amount of about 25% by weight of the base blend, and the second fluid loss additive is present in the cement mix in an amount of about 75% by weight of the base blend.

11. The method of claim 1 wherein the first fluid loss and the second fluid loss additive are present in the base blend in a ratio of about 1:3.

12. The method of claim 1 wherein the proportioned fluid loss additives comprise non-ionic water based soluble polymers.

13. The method of claim 1 wherein the proportioned fluid loss additives comprise hydrophobically modified non-ionic water based soluble polymers.

14. The method of claim 1 wherein the proportioned fluid loss additives comprise hydroxyethylcelluloses.

15. The method of claim 1 wherein the proportioned fluid loss additives comprise hydrophobically modified hydroxyethylcelluloses.

16. The method of claim 1 wherein the first fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the second fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

17. The method of claim 16 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

18. The method of claim 1 wherein the mixing fluid comprises water.

19. The method of claim 1 wherein the water is present in a range of about 22% to about 200% by weight of the base blend.

20. The method of claim 1 wherein the water is present in a range of about 40% to about 180% by weight of the base blend.

21. The method of claim 1 wherein the water is present in a range of about 90% to about 160% by weight of the base blend.

22. The method of claim 18 wherein the mixing fluid further comprises a defoaming agent.

23. The method of claim 1 wherein the base blend comprises at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

24. The method of claim 1 wherein the cement composition formed has a density in a range of from about 1350 kg/m^3 to about 1500 kg/m^3.

25. The method of claim 1 wherein the cement composition further comprises at least one accelerating additive.

26. The method of claim 25 wherein the at least one accelerating additive is selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

27. The method of claim 1 wherein the cement mix comprises:

a base blend comprising zeolite and at least one cementitious material;

proportioned fluid loss control additives, which proportioned fluid loss additives comprise at least a first fluid loss additive having a first molecular weight and at least a second fluid loss additive having a second molecular weight, which second molecular weight is less than the first molecular weight, and which first fluid loss additive and second fluid loss additive are present in the base blend in a ratio of about 1:5.67; and

at least one accelerating additive in an amount of about 0.5% to about 10% by weight of the base blend.

28. The method of claim 27 wherein the accelerating additive is present in the cement mix in an amount of from about 2% to about 8% by weight of the base blend.

29. The method of claim 1 wherein the zeolite is selected from the group consisting of analcime (hydrated sodium aluminum silicate), bikitaite (lithium aluminum silicate), brewsterite (hydrated strontium barium calcium aluminum silicate), chabazite (hydrated calcium aluminum silicate), clinoptilolite (hydrated sodium aluminum silicate), faujasite (hydrated sodium potassium calcium magnesium aluminum silicate), harmotome (hydrated barium aluminum silicate), heulandite (hydrated sodium calcium aluminum silicate), laumontite (hydrated calcium aluminum silicate), mesolite (hydrated sodium calcium aluminum silicate), natrolite (hydrated sodium aluminum silicate), paulingite (hydrated potassium sodium calcium barium aluminum silicate), phillipsite (hydrated potassium sodium calcium aluminum silicate), scolecite (hydrated calcium aluminum silicate), stellerite (hydrated calcium aluminum silicate), stilbite (hydrated sodium calcium aluminum silicate) and thomsonite (hydrated sodium calcium aluminum silicate).

30. A method for preparing a cement mix comprising:

mixing zeolite and at least one cementitious material to form a base blend for the cement mix;

mixing the base blend with proportioned fluid loss additives, which proportioned fluid loss additives comprise at least a first fluid loss additive having a first molecular weight and at least a second fluid loss additive having a second molecular weight, which second molecular weight is less than the first molecular weight, and which first fluid loss additive and second fluid loss additive are present in the base blend in a ratio of about 1:5.67.

31. The method of claim 30 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b] \cdot xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

32. The method of claim 30 wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

33. The method of claim 30 wherein the zeolite is selected from the group consisting of analcime (hydrated sodium aluminum silicate), bikitaite (lithium aluminum silicate), brewsterite (hydrated strontium barium calcium aluminum silicate), chabazite (hydrated calcium aluminum silicate), clinoptilolite (hydrated sodium aluminum silicate), faujasite (hydrated sodium potassium calcium magnesium aluminum silicate), harmotome (hydrated barium aluminum silicate), heulandite (hydrated sodium calcium aluminum silicate), laumontite (hydrated calcium aluminum silicate), mesolite (hydrated sodium calcium aluminum silicate), natrolite (hydrated sodium aluminum silicate), paulingite (hydrated potassium sodium calcium barium aluminum silicate), phillipsite (hydrated potassium sodium calcium aluminum silicate), scolecite (hydrated calcium aluminum silicate), stellerite (hydrated calcium aluminum silicate), stilbite (hydrated sodium calcium aluminum silicate) and thomsonite (hydrated sodium calcium aluminum silicate).

34. The method of claim 30 wherein the first molecular weight is about twelve times as much as the second molecular weight.

35. The method of claim 30 wherein the first molecular weight is about four times as much as the second molecular weight.

36. The method of claim 30 wherein the first molecular weight is about 2.66 times as much as the second molecular weight.

37. The method of claim 30 wherein the first fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the second fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

38. The method of claim 30 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

39. The method of claim 30 wherein the first fluid loss additive is present in the cement mix in an amount of about 15% by weight of the base blend, and the second fluid loss additive is present in the cement mix in an amount of about 85% by weight of the base blend.

40. The method of claim 30 wherein the first fluid loss additive is present in the cement mix in an amount of about 25% by weight of the base blend, and the second fluid loss additive is present in the cement mix in an amount of about 75% by weight of the base blend.

41. The method of claim 30 wherein the first fluid loss additive and the second fluid loss additive are present in the base blend in a ratio of about 1:3.

42. The method of claim 30 wherein the proportioned fluid loss additives comprise non-ionic water based soluble polymers.

43. The method of claim 30 wherein the proportioned fluid loss additives are comprise hydrophobically modified non-ionic water based soluble polymers.

44. The method of claim 30 wherein the proportioned fluid loss additives comprise hydroxyethylcelluloses.

45. The method of claim 30 wherein the proportioned fluid loss additives comprise hydrophobically modified hydroxyethylcelluloses.

46. The method of claim 30 wherein the first fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the second fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

47. The method of claim 46 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

48. The method of claim 30 wherein the base blend comprises at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

49. The method of claim 30 further comprising:

mixing the base blend with at least one accelerating additive selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

50. A cement composition comprising:

a mixing fluid;

a base blend comprising zeolite and cementitious material; and

proportioned fluid loss control additives, which proportioned fluid loss additives comprise at least a first fluid loss additive having a first molecular weight and at least a second fluid loss additive having a second molecular weight, which second molecular weight is less than the first molecular weight, and which first fluid loss additive and second fluid loss additive are present in the base blend in a ratio of about 1:5.67.

51. The cement composition of claim 50 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b] \cdot xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

52. The cement composition of claim 50 wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

53. The cement composition of claim 50 wherein the base blend comprises from about 20 to about 60 weight percent zeolite.

54. The cement composition of claim 50 wherein the base blend about 40 weight percent zeolite.

55. The cement composition of claim 50 wherein the first molecular weight is about twelve times as much as the second molecular weight.

56. The cement composition of claim 50 wherein the first molecular weight is about four times as much as the second molecular weight.

57. The cement composition of claim 50 wherein the first molecular weight is about 2.66 times as much as the second molecular weight.

58. The cement composition of claim 50 wherein the first fluid loss additive comprises hydroxyethylcellulose having a molecular weight in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the second fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

59. The cement composition of claim 50 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

60. The cement composition of claim 50 wherein the first fluid loss additive is present in an amount of about 15% by weight of the base blend, and the second fluid loss additive is present in an amount of about 85% by weight of the base blend.

61. The cement composition of claim 50 wherein the first fluid loss additive is present in an amount of about 25% by weight of the base blend, and the second fluid loss additive is present in an amount of about 75% by weight of the base blend.

62. The cement composition of claim 50 wherein the first fluid loss additive and the second fluid loss additive are present in the base blend in a ratio of about 1:3.

63. The cement composition of claim 50 wherein the proportioned fluid loss control additives comprise non-ionic water based soluble polymers.

64. The cement composition of claim 50 wherein the proportioned fluid loss control additives comprise hydrophobically modified non-ionic water based soluble polymers.

65. The cement composition of claim 50 wherein the proportioned fluid loss control additives comprise hydroxyethylcelluloses.

66. The cement composition of claim 50 wherein the proportioned fluid loss control additives comprise hydrophobically modified hydroxyethylcelluloses.

67. The cement composition of claim 50 wherein the first fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the second fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

68. The cement composition of claim 67 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

69. The cement composition of claim 50 wherein the cement composition has a density in a range of from about 1350 kg/m^3 to about 1500 kg/m^3.

70. The cement composition of claim 50 wherein the cement composition further comprises at least one accelerating additive selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

71. The cement composition of claim 70 wherein the accelerating additive is present in an amount of about 0.5% to about 10% by weight of the base blend.

72. The cement composition of claim 70 wherein the accelerating additive is present in the cement mix in an amount of from about 2% to about 8% by weight of the base blend.

73. The cement composition of claim 50 wherein the zeolite is selected from the group consisting of analcime (hydrated sodium aluminum silicate), bikitaite (lithium aluminum silicate), brewsterite (hydrated strontium barium calcium aluminum silicate), chabazite (hydrated calcium aluminum silicate), clinoptilolite (hydrated sodium aluminum silicate), faujasite (hydrated sodium potassium calcium magnesium aluminum silicate), harmotome (hydrated barium aluminum silicate), heulandite (hydrated sodium calcium aluminum silicate), laumontite (hydrated calcium aluminum silicate), mesolite (hydrated sodium calcium aluminum silicate), natrolite (hydrated sodium aluminum silicate), paulingite (hydrated potassium sodium calcium barium aluminum silicate), phillipsite (hydrated potassium sodium calcium aluminum silicate), scolecite (hydrated calcium aluminum silicate), stellerite (hydrated calcium aluminum silicate), stilbite (hydrated sodium calcium aluminum silicate) and thomsonite (hydrated sodium calcium aluminum silicate).

74. A cement mix comprising:

a base blend comprising zeolite and at least one cementitious material; and

proportioned fluid loss additives, which proportioned fluid loss additives comprise at least a first fluid loss additive having a first molecular weight and at least a second fluid loss additive having a second molecular weight, which second molecular weight is less than the first molecular weight, and which first fluid loss additive and second fluid loss additive are present in the base blend in a ratio of about 1:5.67.

75. The cement mix of claim 74 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b] \cdot xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

76. The cement mix of claim 74 wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

77. The cement mix of claim 74 wherein the zeolite is selected from the group consisting of analcime (hydrated sodium aluminum silicate), bikitaite (lithium aluminum silicate), brewsterite (hydrated strontium barium calcium aluminum silicate), chabazite (hydrated calcium aluminum silicate), clinoptilolite (hydrated sodium aluminum silicate), faujasite (hydrated sodium potassium calcium magnesium aluminum silicate), harmotome (hydrated barium aluminum silicate), heulandite (hydrated sodium calcium aluminum silicate), laumontite (hydrated calcium aluminum silicate), mesolite (hydrated sodium calcium aluminum silicate), natrolite (hydrated sodium aluminum silicate), paulingite (hydrated potassium sodium calcium barium aluminum silicate), phillipsite (hydrated potassium sodium calcium aluminum silicate), scolecite (hydrated calcium aluminum silicate), stellerite (hydrated calcium aluminum silicate), stilbite (hydrated sodium calcium aluminum silicate) and thomsonite (hydrated sodium calcium aluminum silicate).

78. The cement mix of claim 74 wherein the first molecular weight is about twelve times as much as the second molecular weight.

79. The cement mix of claim 74 wherein the first molecular weight is about four times as much as the second molecular weight.

80. The cement mix of claim 74 wherein the first molecular weight is about 2.66 times as much as the second molecular weight.

81. The cement mix of claim 74 wherein the first molecular weight is in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the second fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

82. The cement mix of claim 74 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

83. The cement mix of claim 74 wherein the first fluid loss additive is present in the cement mix in an amount of about 15% by weight of the base blend, and the second fluid loss additive is present in the cement mix in an amount of about 85% by weight of the base blend.

84. The cement mix of claim 74 wherein the first fluid loss additive is present in the cement mix in an amount of about 25% by weight of the base blend, and the second fluid loss additive is present in the cement mix in an amount of about 75% by weight of the base blend.

85. The cement mix of claim 74 wherein the first fluid loss additive and the second fluid loss additive are present in the base blend in a ratio of about 1:3.

86. The cement mix of claim 74 wherein the proportioned fluid loss additives comprise non-ionic water based soluble polymers.

87. The cement mix of claim 74 wherein the proportioned fluid loss additives comprise hydrophobically modified non-ionic water based soluble polymers.

88. The cement mix of claim 74 wherein the proportioned fluid loss additives comprise hydroxyethylcelluloses.

89. The cement mix of claim 74 wherein the proportioned fluid loss additives comprise hydrophobically modified hydroxyethylcelluloses

90. The cement mix of claim 74 wherein the first fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 800,000 atomic mass units to about 1,200,000 atomic mass units, and the second fluid loss additive comprises a hydroxyethylcellulose having a molecular weight in the range of from about 100,000 atomic mass units to about 300,000 atomic mass units.

91. The cement mix of claim 90 wherein the first molecular weight is about 1,000,000 atomic mass units and the second molecular weight is about 225,000 atomic mass units.

92. The cement mix of claim 74 wherein the base blend comprises at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

93. The cement mix of claim 74 further comprising:

at least one accelerating additive selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.